

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

BMG MUSIC, a New York general partnership; : LAVA RECORDS, LLC, a Delaware limited : liability company; PRIORITY RECORDS LLC, : a California limited liability company; ARISTA : RECORDS, INC., a Delaware corporation; : VIRGIN RECORDS AMERICA, INC., a : California corporation; SONY MUSIC : ENTERTAINMENT INC., a Delaware : corporation; LONDON-SIRE RECORDS INC., : a Delaware corporation; CAPITOL RECORDS, : INC., a Delaware corporation; FONOVISA, : INC., a California corporation; INTERSCOPE : RECORDS, a California general partnership; : ELEKTRA ENTERTAINMENT GROUP INC., : a Delaware corporation; LOUD RECORDS, : LLC, a Delaware corporation; WARNER BROS. : RECORDS INC., a Delaware corporation; UMG : RECORDINGS, INC., a Delaware corporation; : MOTOWN RECORD COMPANY, L.P., a : California limited partnership; MAVERICK : RECORDING COMPANY, a California joint : venture; and ATLANTIC RECORDING : CORPORATION, a Delaware corporation, : : : Plaintiffs, : : : v. : : : DOES 1 – 203, : : : Defendants. : : : :	CIVIL ACTION NO. 04-cv-650
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DECLARATION OF SETH SCHOEN

I, Seth Schoen, declare as follows:

1. I am a Staff Technologist with the Electronic Frontier Foundation (EFF), and make this declaration on my own personal knowledge.
2. The purpose of this declaration is to set forth facts, which were readily available to the Plaintiffs from free, public Internet sources at and before the time they filed suit, that establish that many of the unnamed defendants in the above-referenced case (hereinafter "Does") use Internet connections physically located far from this District and therefore are likely not located in this District.

3. By reviewing exhibits attached to the Complaint, I compiled a list of the Internet Protocol (IP) addresses that the plaintiffs attribute to each of the first 25 Doe defendants. That list of "Doe IP Addresses" is attached as Exhibit A.

4. There are many tools freely available to the public that help reveal where a person using a particular IP address is likely to be physically located.

5. One means of learning about where an IP address is physically located is known as "reverse domain name service" or "reverse DNS". When an Internet service provider ("ISP") allocates or prepares to allocate IP addresses to customers, it typically creates and publishes database records assigning a human-readable "domain name" to each numerical IP address. The reverse lookup information can be obtained by anyone using a program such as "host", or with web-based tools such as SamSpade.org's DNS lookup, <<http://samspade.org/t/dns?>>.

6. One of the purposes of reverse DNS service is to help interested parties learn more about what a computer is used for, what organization's network it is connected to, and, in many cases, where the computer is physically located. Typically, for home users of dial-up or broadband connections, such as DSL or cable-modem services, a domain name obtained from reverse DNS will identify the ISP that assigned the IP address.

7. In addition, such a domain name will frequently give an approximate physical location. For example, one of the Does here was alleged to use the IP address 68.51.108.176. The reverse DNS database identifies this computer as "pcp01052023pcs.muncie01.in.comcast.net", revealing its likely physical location to be in or near the city of Muncie, Indiana. This means that in all likelihood, the subscriber using this IP address is located in or near Muncie, Indiana.

8. For each of the IP addresses alleged by plaintiffs to belong to Does 1-25, I used the "host" program to perform a reverse lookup against the publicly-accessible reverse DNS service. The list of domain names corresponding to the Doe IP addresses 1-25 is attached as Appendix A.

9. Another means of learning where an IP address is located is to use a public

database operated by the American Registry for Internet Numbers ("ARIN database"). ARIN is the authority responsible for the initial allocation of IP addresses to ISPs located in the United States. ARIN maintains public records indicating to whom a given IP address has been allocated. Large ISPs, such as Comcast, may apply to ARIN multiple times to receive multiple "blocks" or ranges of IP addresses. Each such block may be dedicated to a particular purpose or geographic area.

10. The ARIN database can be searched using a public web site provided by ARIN, or by using a program called "whois".

11. For each of the IP addresses alleged by plaintiffs to belong to Does 1-25, I also used the "whois" program to search ARIN's database. In each case, the ARIN database indicated that the IP address in question was assigned to Comcast and also provide a more specific geographic designation. The list of ARIN records for the Doe IP addresses 1-25 is attached as Appendix B.

12. Reverse DNS and ARIN records indicate that Does 1-25 in this lawsuit include Comcast customers with Internet connections located in or near: Grand Rapids, MI; Muncie, IN; Sacramento, CA; Albuquerque, NM; Mount Prospect, IL; and in the states of New Jersey, Oregon, Colorado, Minnesota, Texas, Utah.

13. Because DSL and cable modem connections are provided from local hubs to users in a particular geographic region, there is good reason to believe that the geographic location data obtained by these methods actually reflects the physical location of the Internet connection. In other words, the geographic designations obtained by these methods likely indicate the locations of the residences or other venues where the Does use their Internet-connected computers.

14. In my experience, computer professionals are generally aware of the existence and function of the reverse DNS and whois services, and would use either or both when they needed to learn where a given IP address was physically located. These techniques are readily and easily available to the recording companies and the computer professionals they have

employed to perform the investigations leading to this lawsuit.

15. In addition, other techniques and other publicly-available information can serve to identify and confirm the general physical location of a particular Internet user. All these techniques were and are available to the plaintiffs here. Indeed, plaintiffs in this action likely determined that the Does identified here were Comcast subscribers by using reverse DNS, the ARIN database, or other similar techniques that also tend to indicate a subscriber's physical location.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this document was executed in San Francisco, California.

Respectfully submitted,

DATED: February 23, 2004

By


Seth Schoen

EXHIBIT A

IP addresses of Does 1-25:

68.39.180.247
67.164.103.240
68.40.231.194
68.37.126.65
12.241.169.68
12.231.137.174
67.167.109.219
24.7.160.200
24.245.67.141
68.84.51.127
67.162.167.4
68.43.99.42
24.7.166.163
68.51.108.176
24.0.104.224
68.53.95.84
12.248.53.115
24.9.253.18
24.99.78.1
68.35.160.172
12.211.77.239
68.36.193.248
24.3.112.252
24.10.239.164
68.60.39.40

APPENDIX A

Name: bgp597526bgs.mnhwkn01.nj.comcast.net
Address: 68.39.180.247

Name: c-67-164-103-240.client.comcast.net
Address: 67.164.103.240

Name: pcp05007217pcs.sanarb01.mi.comcast.net
Address: 68.40.231.194

Name: bgp472112bgs.rosele01.nj.comcast.net
Address: 68.37.126.65

Name: 12-241-169-68.client.attbi.com
Address: 12.241.169.68

Name: 12-231-137-174.client.attbi.com
Address: 12.231.137.174

Name: c-67-167-109-219.client.comcast.net
Address: 67.167.109.219

Name: c-24-7-160-200.client.comcast.net
Address: 24.7.160.200

Name: c-24-245-67-141.mn.client2.attbi.com
Address: 24.245.67.141

Name: pcp02329792pcs.summit01.nj.comcast.net
Address: 68.84.51.127

Name: c-67-162-167-4.client.comcast.net
Address: 67.162.167.4

Name: bgp01038722bgs.sothwt01.mi.comcast.net
Address: 68.43.99.42

Name: c-24-7-166-163.client.comcast.net
Address: 24.7.166.163

Name: pc01052023pcs.muncie01.in.comcast.net
Address: 68.51.108.176

Name: c-24-0-104-224.client.comcast.net
Address: 24.0.104.224

Name: pc03350995pcs.aubrn01.mi.comcast.net
Address: 68.53.95.84

Name: 12-248-53-115.client.attbi.com
Address: 12.248.53.115

Name: c-24-9-253-18.client.comcast.net
Address: 24.9.253.18

Name: c-24-99-78-1.atl.client2.attbi.com
Address: 24.99.78.1

Name: bgp01386318bgs.brodwy01.nm.comcast.net
Address: 68.35.160.172

Name: 12-211-77-239.client.attbi.com
Address: 12.211.77.239

Name: pcp04443118pcs.verona01.nj.comcast.net
Address: 68.36.193.248

Name: c-24-3-112-252.client.comcast.net
Address: 24.3.112.252

Name: c-24-10-239-164.client.comcast.net
Address: 24.10.239.164

Name: pcp01444206pcs.watrfd01.mi.comcast.net
Address: 68.60.39.40

APPENDIX B

68.39.180.247

Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)

68.32.0.0 - 68.63.255.255

Comcast Cable Communications, Inc. NJ-NORTH-8 (NET-68-39-128-0-1)

68.39.128.0 - 68.39.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

67.164.103.240

Comcast Cable Communications, IP Services ATT-COMCAST (NET-67-160-0-0-1)

67.160.0.0 - 67.182.191.255

Comcast Cable Communications, Inc. OREGON-3 (NET-67-164-96-0-1)

67.164.96.0 - 67.164.111.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

68.40.231.194

Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)

68.32.0.0 - 68.63.255.255

Comcast Cable Communications, Inc MICHIGAN-A-1 (NET-68-40-0-0-1)

68.40.0.0 - 68.41.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

68.37.126.65

Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)

68.32.0.0 - 68.63.255.255

Comcast Cable Communications, Inc. NJ-NORTH-17 (NET-68-37-96-0-1)

68.37.96.0 - 68.37.127.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

12.241.169.68

AT&T WorldNet Services ATT (NET-12-0-0-0-1)

12.0.0.0 - 12.255.255.255

Comcast Corporation COMCAST-12-241-168-0-GRAND-RAPIDS-AREA (NET-12-241-168-0-1)

12.241.168.0 - 12.241.175.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

12.231.137.174

AT&T WorldNet Services ATT (NET-12-0-0-0-1)

12.0.0.0 - 12.255.255.255

Comcast Corporation COMCAST-12-231-128-0-OREGON (NET-12-231-128-0-1)

12.231.128.0 - 12.231.143.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

67.167.109.219

Comcast Cable Communications, IP Services ATT-COMCAST (NET-67-160-0-0-1)

67.160.0.0 - 67.182.191.255

Comcast Cable Communications, IP Services ILLINOIS-6 (NET-67-167-0-0-1)

67.167.0.0 - 67.167.127.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

24.7.160.200

Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)

24.0.0.0 - 24.15.255.255

Comcast Cable Communications SACRAMENTO-8 (NET-24-7-128-0-1)

24.7.128.0 - 24.7.191.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

24.245.67.141

OrgName: Comcast Cable Communications Holdings, Inc

OrgID: CCCH-3

Address: 1800 Bishops Gate Blvd

City: Mt Laurel

StateProv: NJ

PostalCode: 08054

Country: US

NetRange: 24.245.0.0 - 24.245.79.255

CIDR: 24.245.0.0/18, 24.245.64.0/20

NetName: CCCH3-12

NetHandle: NET-24-245-0-0-1

Parent: NET-24-0-0-0-0

NetType: Direct Allocation

NameServer: NS4.ATTBB.NET

NameServer: NS5.ATTBB.NET

NameServer: NS6.ATTBB.NET

Comment:

RegDate:

Updated: 2003-08-19

OrgAbuseHandle: NAPO-ARIN
OrgAbuseName: Network Abuse and Policy Observance
OrgAbusePhone: +1-856-317-7272
OrgAbuseEmail: abuse@comcast.net

OrgTechHandle: IC161-ARIN
OrgTechName: Comcast Cable Communications Inc
OrgTechPhone: +1-856-317-7200
OrgTechEmail: cips_ip-registration@cable.comcast.com

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.84.51.127
Comcast Cable Communications, Inc. JUMPSTART-2 (NET-68-80-0-0-1)
68.80.0.0 - 68.87.255.255
Comcast Cable Communications, Inc. NJ-NORTH-10 (NET-68-84-48-0-1)
68.84.48.0 - 68.84.63.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

67.162.167.4
Comcast Cable Communications, IP Services ATT-COMCAST (NET-67-160-0-0-1)
67.160.0.0 - 67.182.191.255
Comcast Cable Communications, Inc. MICHIGAN-1 (NET-67-162-160-0-1)
67.162.160.0 - 67.162.175.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.43.99.42
Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255
Comcast Cable Communications, Inc MICHIGAN-A-1 (NET-68-43-0-0-1)
68.43.0.0 - 68.43.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

24.7.166.163
Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)
24.0.0.0 - 24.15.255.255
Comcast Cable Communications SACRAMENTO-8 (NET-24-7-128-0-1)
24.7.128.0 - 24.7.191.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.51.108.176

Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255

Comcast Cable Communications, Inc. MUNCIE-1 (NET-68-51-64-0-1)
68.51.64.0 - 68.51.127.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

24.0.104.224

Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)
24.0.0.0 - 24.15.255.255

Comcast Cable Communications TEXAS-8 (NET-24-0-0-0-2)
24.0.0.0 - 24.1.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

68.53.95.84

Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255

Comcast Cable Communications, Inc. MICHIGAN-B-2 (NET-68-53-80-0-1)
68.53.80.0 - 68.53.95.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

12.248.53.115

AT&T WorldNet Services ATT (NET-12-0-0-0-1)
12.0.0.0 - 12.255.255.255

Comcast Corporation COMCAST-12-248-52-0-MOUNT-PROSPECT (NET-12-248-52-0-1)
12.248.52.0 - 12.248.55.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

24.9.253.18

Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)
24.0.0.0 - 24.15.255.255

Comcast Cable Communications COLORADO-10 (NET-24-8-0-0-1)
24.8.0.0 - 24.9.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15

Enter ? for additional hints on searching ARIN's WHOIS database.

24.99.78.1

OrgName: Comcast Cable Communications Holdings, Inc
OrgID: CCCH-3
Address: 1800 Bishops Gate Blvd
City: Mt Laurel
StateProv: NJ
PostalCode: 08054
Country: US

NetRange: 24.98.0.0 - 24.99.255.255
CIDR: 24.98.0.0/15
NetName: CCCH3-2
NetHandle: NET-24-98-0-0-1
Parent: NET-24-0-0-0-0
NetType: Direct Allocation
NameServer: NS4.ATTBB.NET
NameServer: NS5.ATTBB.NET
NameServer: NS6.ATTBB.NET
Comment:
RegDate:
Updated: 2004-02-18

OrgAbuseHandle: NAPO-ARIN
OrgAbuseName: Network Abuse and Policy Observance
OrgAbusePhone: +1-856-317-7272
OrgAbuseEmail: abuse@comcast.net

OrgTechHandle: IC161-ARIN
OrgTechName: Comcast Cable Communications Inc
OrgTechPhone: +1-856-317-7200
OrgTechEmail: cips_ip-registration@cable.comcast.com

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.35.160.172
Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255
Comcast Cable Communications, Inc. ALBUQUERQUE-2 (NET-68-35-128-0-1)
68.35.128.0 - 68.35.191.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

12.211.77.239
AT&T WorldNet Services ATT (NET-12-0-0-0-1)
12.0.0.0 - 12.255.255.255
Comcast Corporation COMCAST-12-211-72-0-WASHINGTON (NET-12-211-72-0-1)
12.211.72.0 - 12.211.79.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.36.193.248
Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255
Comcast Cable Communications, Inc. NJ-NORTH-1 (NET-68-36-0-0-1)
68.36.0.0 - 68.36.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

24.3.112.252
Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)
24.0.0.0 - 24.15.255.255
Comcast Cable Communications PENNSYLVANIA-10 (NET-24-3-0-0-1)
24.3.0.0 - 24.3.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

24.10.239.164
Comcast Cable Communications, IP Services EASTERNSHORE-1 (NET-24-0-0-0-1)
24.0.0.0 - 24.15.255.255
Comcast Cable Communications UTAH-11 (NET-24-10-128-0-1)
24.10.128.0 - 24.10.255.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.

68.60.39.40
Comcast Cable Communications, Inc. JUMPSTART-1 (NET-68-32-0-0-1)
68.32.0.0 - 68.63.255.255
Comcast Cable Communications, Inc. MICHIGAN-B-3 (NET-68-60-32-0-1)
68.60.32.0 - 68.60.63.255

ARIN WHOIS database, last updated 2004-02-22 19:15
Enter ? for additional hints on searching ARIN's WHOIS database.
